

# **Completion of Milestone 2.2.4.2.2/FY01/A “Completion of Mechanical Assembly of PuCTF in the Plutonium Facility”**

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**March 2, 2001**

**U.S. Department of Energy**

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## **FMD Program**

*Plutonium Immobilization  
Project*

2 March 2001

**TO: GUY ARMANTROUT**  
**FROM: WILLIAM BRUMMOND**  
**SUBJECT: Completion of milestone 2.2.4.2.2/FY01/a "Completion of  
Mechanical Assembly of PuCTF in the Plutonium Facility"**

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The subject milestone was completed on March 1st. This milestone signifies the completion the mechanical installation and assembly of PuCTF in room 1345 in the LLNL Plutonium Facility. This installation included equipment both in room 1345 and in the loft. As reported in the last milestone, "LLNL Pu Facility space prepared for installation of PUCTF", milestone 6.2.2/FY00/c, steel plates had been installed on the floor to support the PuCTF glovebox and equipment. The steel plate system was a substantial help in completing the mechanical installation reported here.

The glovebox sections were brought into the room and attached together. Temporary seismic tie-down straps were used to brace the assembly. This temporary tie-down also provided flexibility for alignment and adjustment. The internal equipment, (attritors, granulator, press feed shoe and die set, furnace, robot and powder transport system) were subsequently installed. The glovebox was then welded to the steel plates for permanent seismic anchoring. The control racks were attached to the floor and are ready for wiring and the press hydraulic power unit has been installed in the loft.

The next steps will be to complete the electrical wiring and connections, connect the utility lines and to check out the system. When this is completed in June, we will meet the next milestone for cold start-up of PuCTF.

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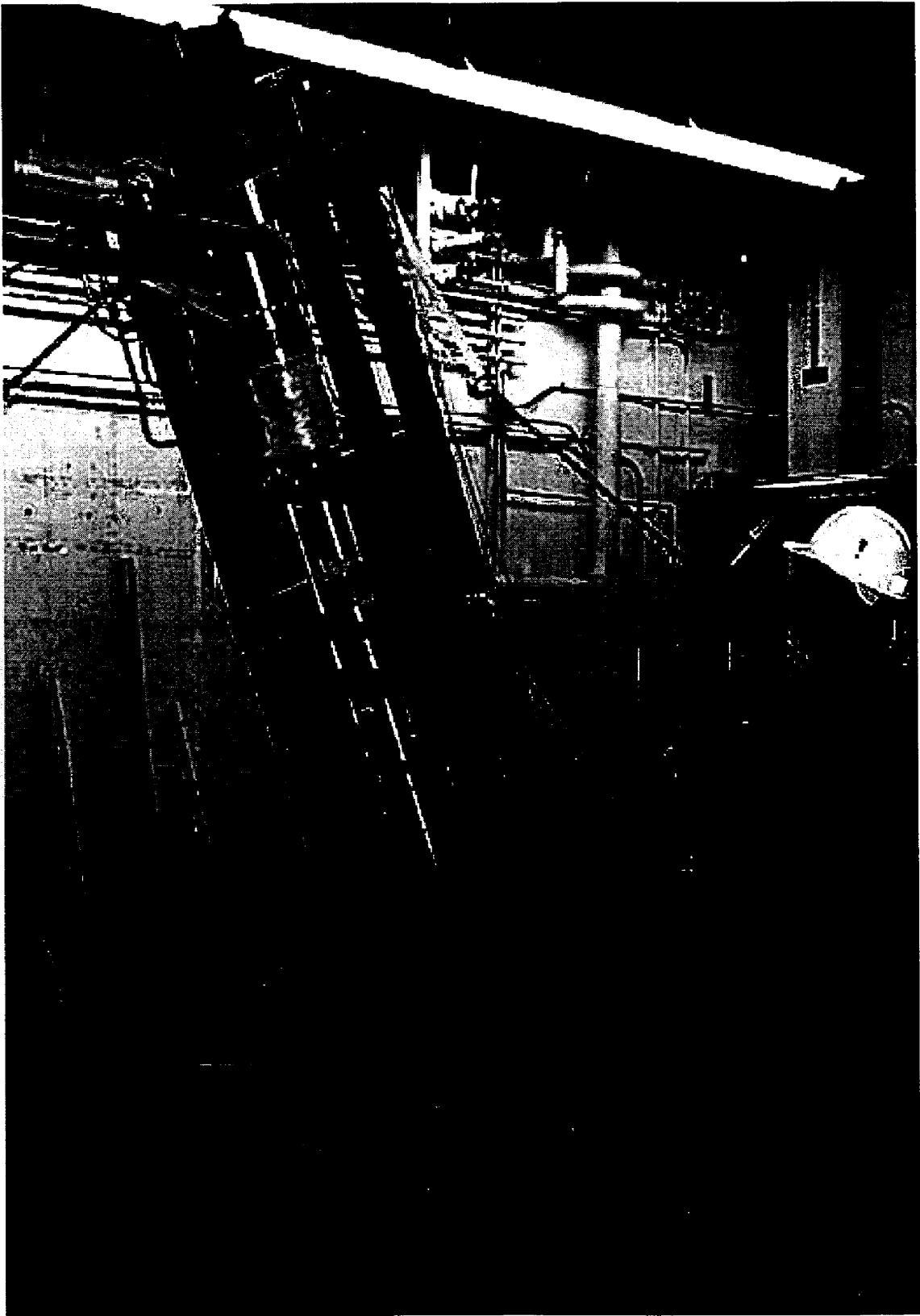
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The Press Hydraulic Power Unit is lifted into the Loft

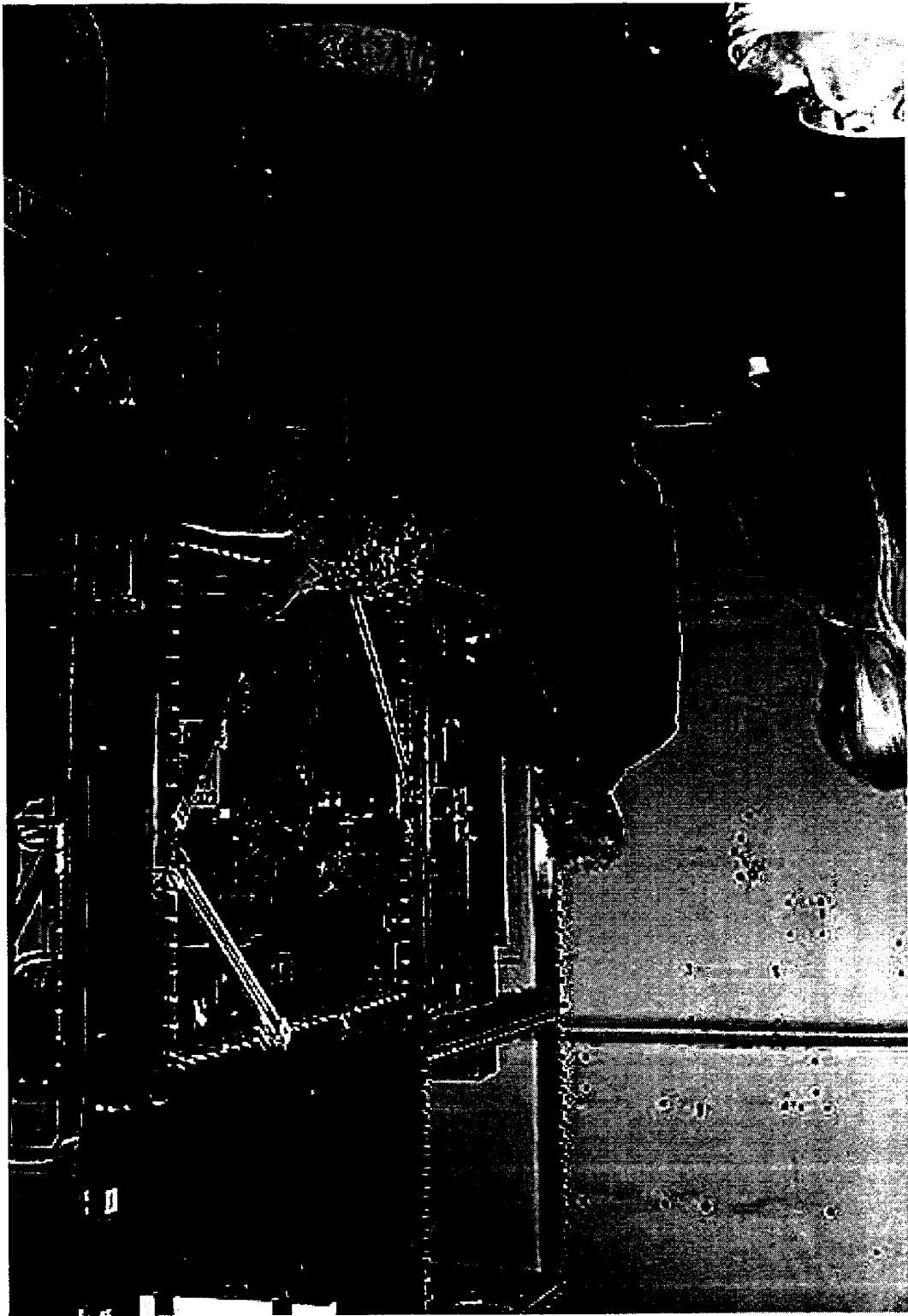


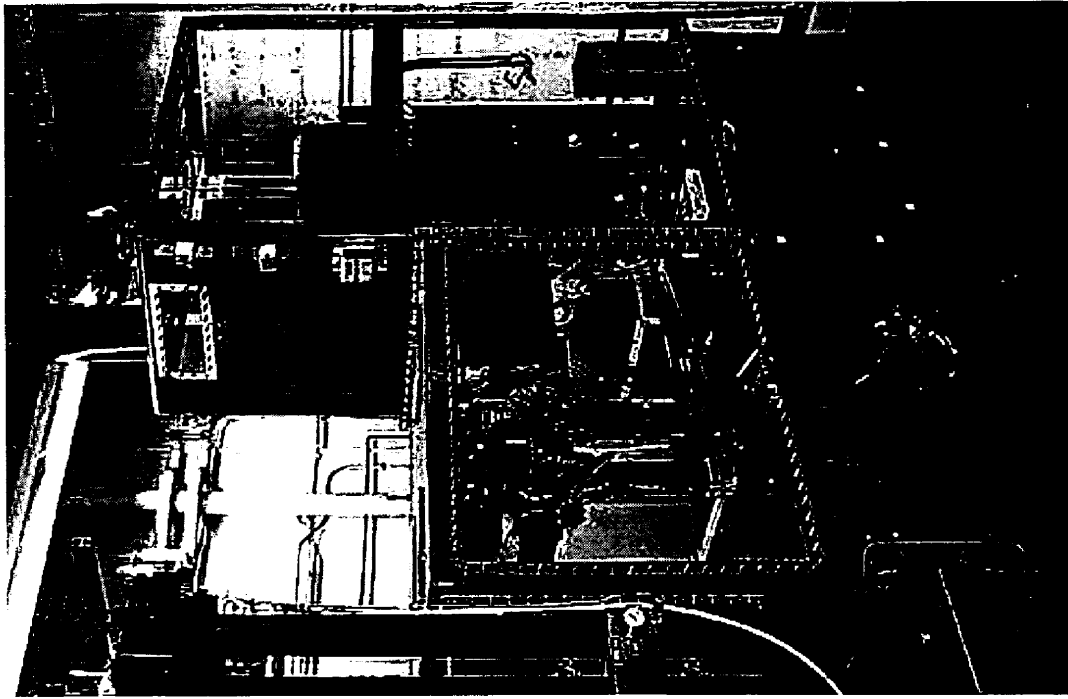
The Press Hydraulic Power Unit is anchored to the floor in a steel pan



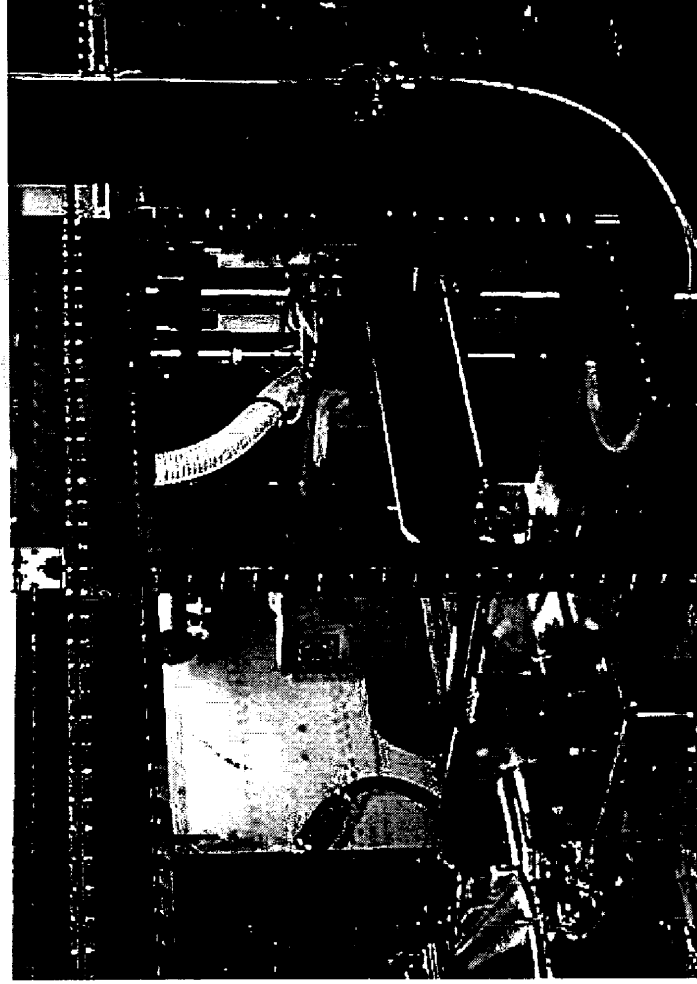
Righting the Press

Assembling the Furnace Box



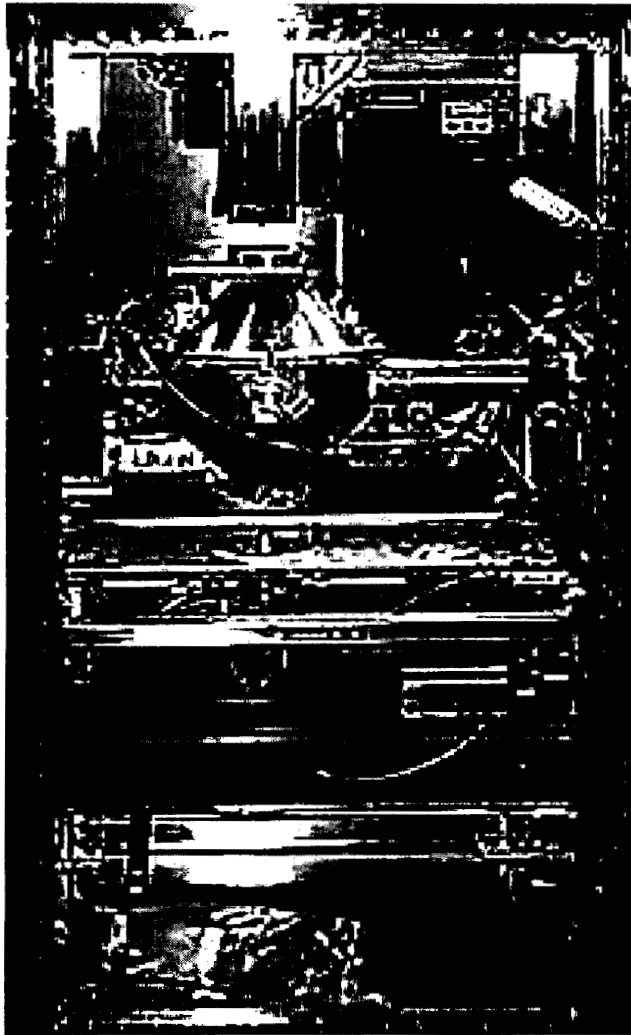


The Furnace and Puck Robot are installed

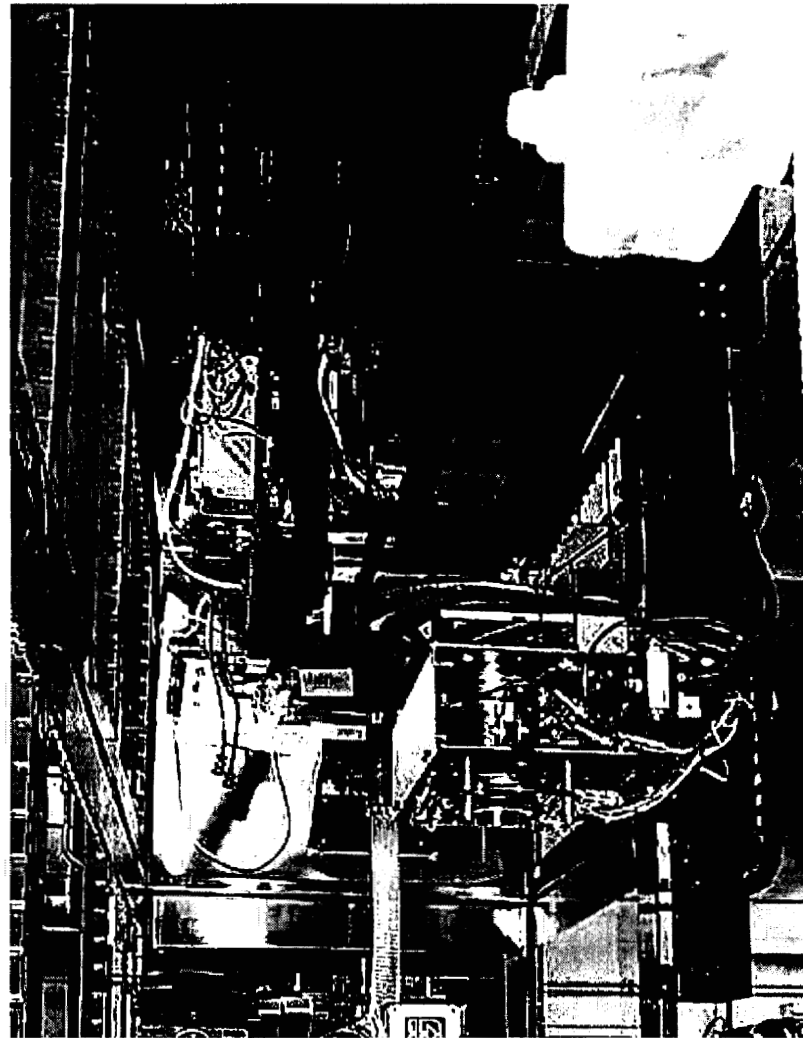


The Press Feed Shoe is in place

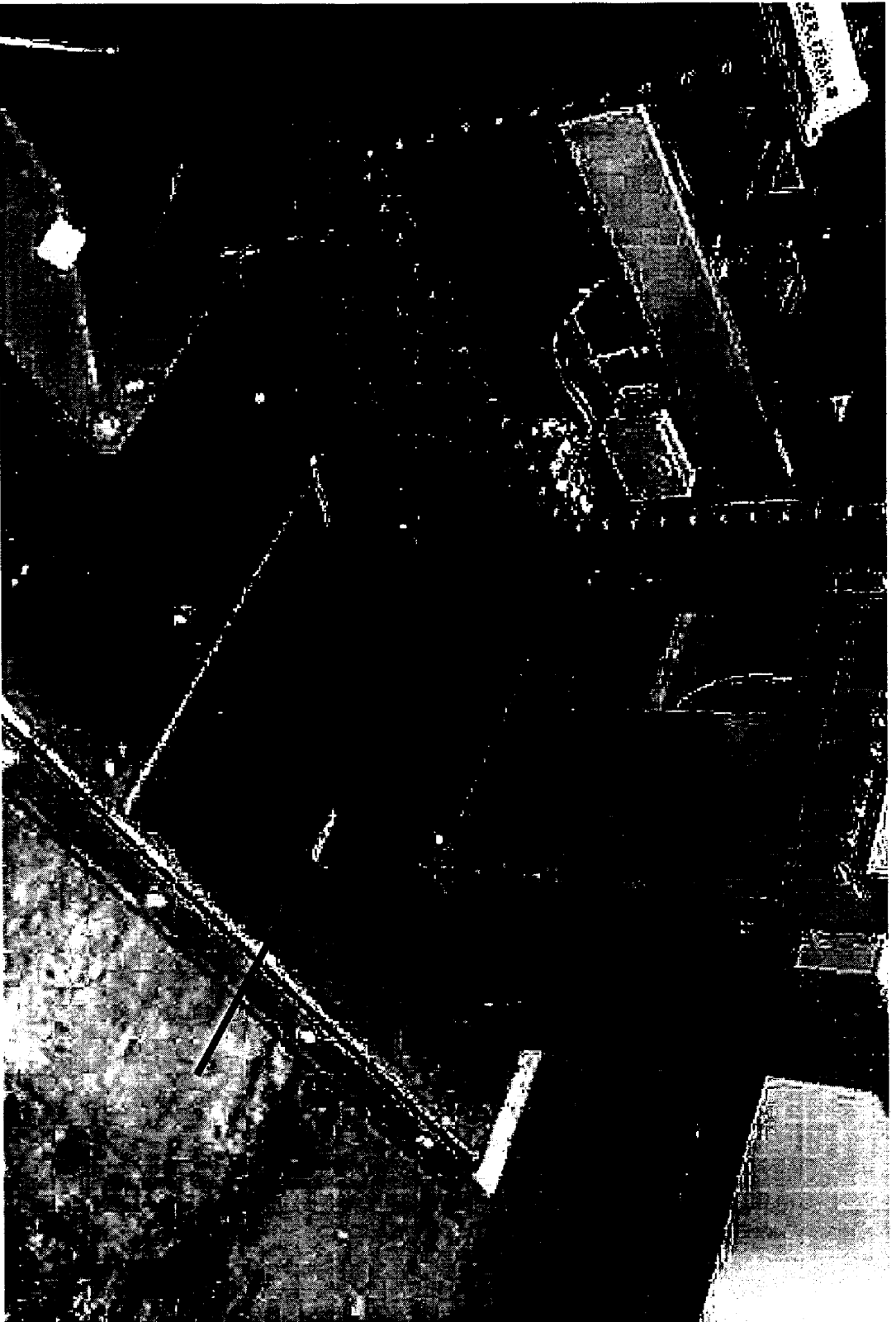




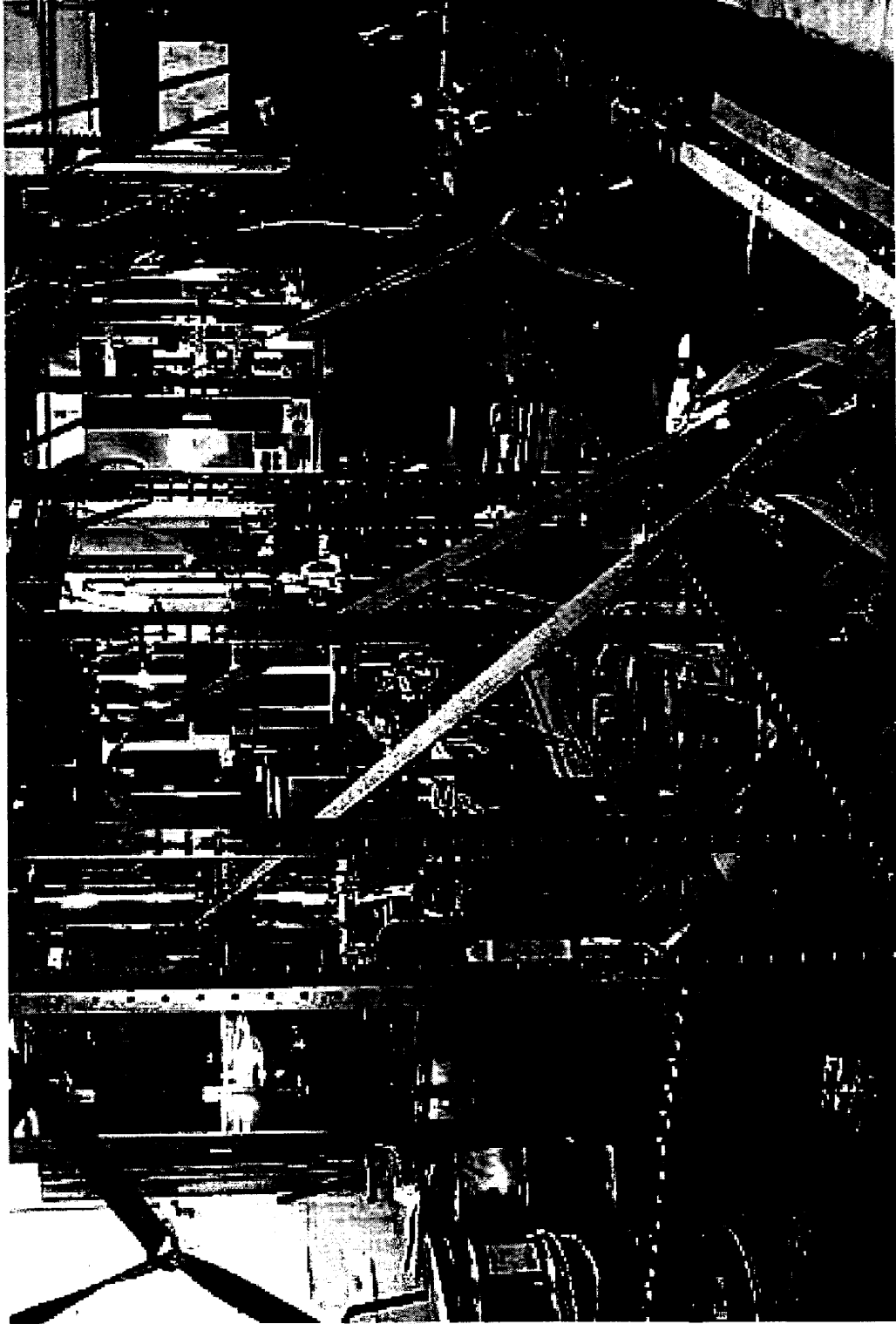
The Granulator is placed over the long axis  
Of the Material Transport System



The Transport/Granulator docking station



The glovebox legs are securely welded to the steel floor plates



The glovebox is temporarily restrained